

AGE DIFFERENCES IN RESPONSES TO MARKETING COMMUNICATION TECHNIQUES USED IN ONLINE SOCIAL NETWORKS

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ABSTRACT

In order to demonstrate that there are age differences in the way online consumers react to online marketing communication techniques, the study builds on a previously tested and validated empirical model showing the influence of online marketing communication via social networks on behavioral intentions, by continuing in a structural equation modeling approach. Significant differences between users of different age categories are found and implications for online communication practitioners are discussed, with strategic proposals stemming from these results. The study addresses the manner in which potential consumers of different ages react to and examine online social media marketing communication efforts, and how their perceptions influence various intentions. By drawing from theories of consumer behavior, a previously confirmed model for online user behavior in response to online marketing messages is tested for each age group. The results demonstrate that direct and positive links between the user perceptions of online marketing communication, and direct and positive links between users' attitudes towards online communication and their intentions vary in strength with different age groups. Conclusions also feature strategic communication proposals, based on the findings.

KEYWORDS: *consumer behavior, online communication, structural equation modeling, online social networks, promotional techniques, generational cohorts*

INTRODUCTION

New marketing communication efforts must focus on dialogue, given the interactive character of the social media environment.[1] Online media tools now allow practitioners to maintain an open dialogue with consumers and influence their intentions.

Age as a variable is strongly correlated with the level of social media platforms usage. Today, 90% of young adults use social media, a 78-percentage point increase since 2005. There has also been a 69- point bump among users ages 30-49, to 77% today. While usage among young adults leveled off as early as 2010, since then there has been a surge in use among seniors, at over 35%.[2] Studies focused on how different people use the

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Internet have found systematic differences across user types among their online pursuits. [3][4][5], thus it is worth considering whether social networking site users may also react differently towards various marketing communication stimuli, otherwise researchers and practitioners risk unintentionally excluding entire age groups in the suggestion of online communication strategies.

By adding to our own work on a previously tested and validated model [1], and examining the effects of age as a variable in complementing the research for our previously confirmed model on a relevant sample of 1097 Romanian social networking site users, results that may aid researchers in explaining the inconsistencies of prior online social media communication research, thus providing a better understanding of age-based preferences and likely responses to marketing communication messages via social networking sites.

1. CONCEPTUAL MODEL AND OBJECTIVES

In order to show the influences on user intent, variables and links were formulated in accordance with the Theory of Planned Behavior (TPB), used to examine relationships between variables and the individual's intention to exhibit a certain behavior [6], as participation in online communication and the intentions of social networking site members to assimilate marketing information conveyed by companies, to share it or to become loyal to a brand or company are all volitional behaviors. TPB has also been widely used in the exploration of variables influencing behavior of Internet users. [7] All the scales used exhibited high internal consistency in our previous research, and the large sample size allowed for a generational cohort comparison of Romanian social networking site users.

In the online environment, multiple studies have established the mediating role of attitude in the relationship between stimuli and online purchase intention and word of mouth generation (*e.g.* [8-10]).

The structural model was based on the Partial Least Squared (PLS) regression algorithm and includes the standardized β coefficients and R squared for each endogenous variable used in quantifying the variation of the variables which can be explained by variation in other variables. Model results are shown in both Figure 1.

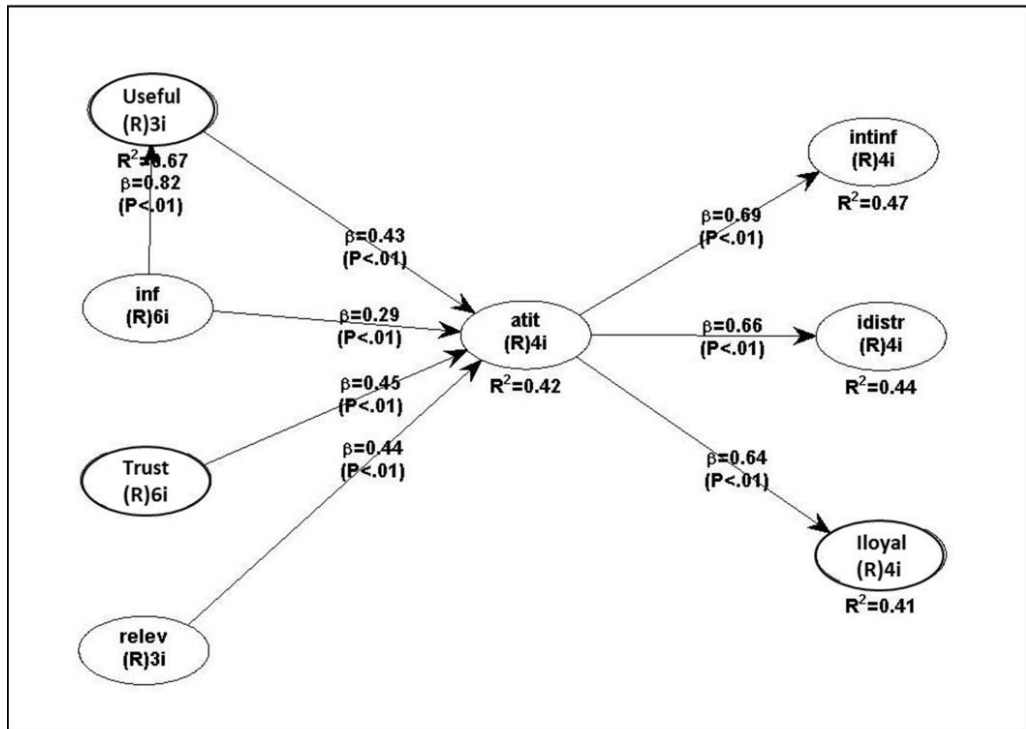


Figure 1. Structural Equation Model Results
 (Source: Perju-Mitran et.al., 2014, p.251)

The present study has two main objectives:

- O1: To prove that previously hypothesized variable connections are valid regardless of age category;
- O2: To show the effect sizes in model relations in accordance with age categories.

In order to accomplish objective no. 2, a restricted PLS regression algorithm (structural equation modeling by means of the partial least squares method) model analysis was performed for each studied age group.

Regarding the distribution of social media users by age, the respondents were grouped as can be seen in Fig. 2.

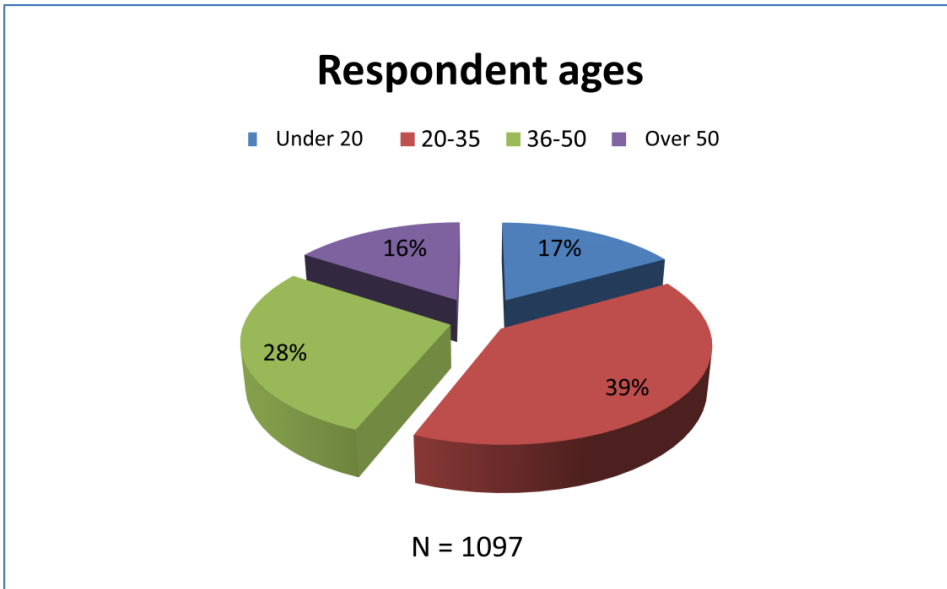


Figure 2. Respondents by age groups

2. METHODOLOGY

Basic demographic information was measured using standard modes of operationalization. Respondents were asked to pick their age category, restricted to: under 20 years old, 20 to 35, 36 to 50, and over 50.

In digital marketing research and in consumer behavior modeling in particular, the study of control variables is imperative, indicating the characteristics of respondents (such as demographic variables). Since a structural model has been previously validated in this, the effects of “Age” as a control variable on the proposed model will be studied.

To find out whether there are differences in the intensity of causal links according to the respondent's age, we started from the premise that all causal relationships defined in the model remain significant regardless of age and redefined our model by introducing the “Age” variable, and creating causal relationships between “Age” and each latent variable of the model.

3. RESULTS

As per our first objective, the results of introducing the “Age” variable into the model are presented in Fig. 3. and Table 1.

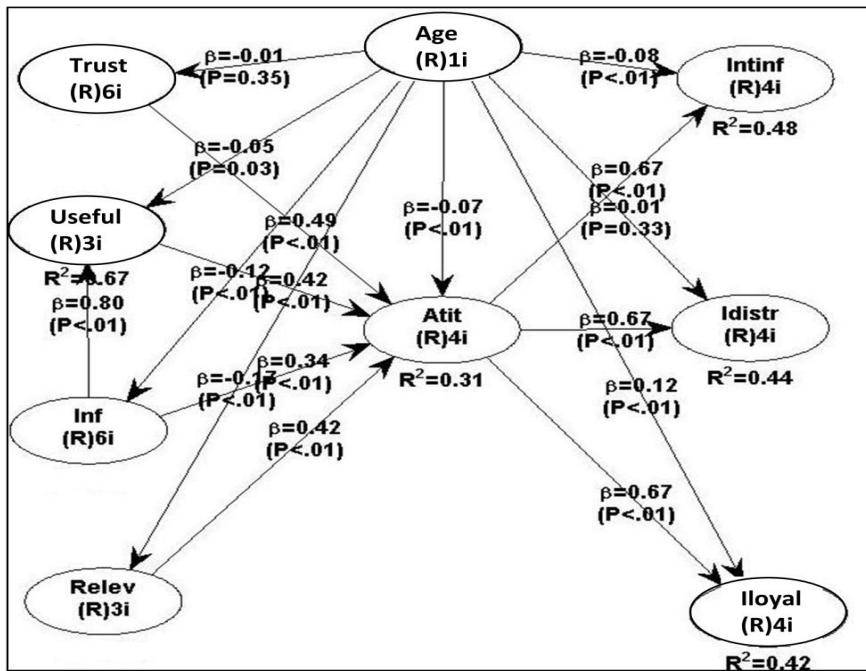


Figure 3. Model with "Age" Variable

Table 1. Path coefficients and p values for the "Age" control variable

	Trust	Useful	Inf	Relev	Atit	Intinf	Idistr	Iloyal
Trust								
Useful			0.804 p<0.001					
Inf								
Relev								
Atit	0.494 p<0.001	0.423 p<0.001	0.339 p<0.001	0.424 p<0.001				
Intinf					0.668 p<0.001			
Idistr					0.668 p<0.001			
Iloyal					0.665 p<0.001			

Based on the new β and p values for the control variables, the hypotheses underlying the previous model [1] are rechecked

Table 2. Testing hypotheses for the "Age" control variable

Nr. Ip.	Hypotheses	β (P)	Valid
H1	There is a direct and positive relationship between the "Informative character" (Inf) of the promotional messages sent by companies through the online social platform and the "Perceived usefulness" (Useful) of the promotional messages sent regardless of the age of the user.	0.804 (<0.001)	yes
H2	There is a direct and positive relationship between the user's "Trust" in the messages sent by companies via the online social platform and the "Attitude" (Atit) towards the messages sent by companies through the online social platform, regardless of the user's age.	0.494 (<0.001)	yes
H3	There is a direct and positive relationship between the "Perceived usefulness" of promotional messages sent by companies through the online social platform and the "Attitude" towards the messages sent by companies through the online social platform, regardless of the age of the user..	0.423 (<0.001)	yes
H4	There is a direct and positive relationship between the "Informative character" of the promotional messages sent by companies through the online social platform and the "Attitude" towards the messages sent by companies through the online social platform, regardless of the age of the user.	0.339 (<0.001)	yes
H5	There is a direct and positive relationship between the "Relevance" of the promotional messages sent by companies through the online social platform and the "Attitude" towards the messages sent by companies through the online social platform, regardless of the age of the user.	0.424 (<0.001)	yes
H6	There is a direct and positive relationship between the "Attitude" towards the messages sent by companies through the online social networking platform and the "Intention to use" (Intinf) the information provided by companies through online social platforms, regardless of the user's age.	0.668 (<0.001)	yes
H7	There is a direct and positive relationship between the "Attitude" towards the messages sent by companies through the online social platform and the "Intention to distribute" (Idistr) the information within the social platform, regardless of age.	0.668 (<0.001)	yes
H8	There is a direct and positive relationship between the "Attitude" towards messages sent by companies through the online social platform and the "Intention to become loyal" (Iloyal) to the company, regardless of the user's age.	0.665 (<0.001)	yes

From testing hypotheses for the age control variable, it can be noticed that the causal relationships in the analysis are maintained irrespective of the user’s age. We can say with certainty that a positive attitude influences the intentions (to acquire supplementary information, to distribute the information, to become loyal to the company or brand) directly and positively, regardless of age, thus competing our first objective.

In order to test relationships in control groups, each relationship will be analyzed for 3 age groups (under 20 years and 20-35 years, 36-50 years, over 50 years), as the "under 20" group does not has representativeness by itself. We take into consideration the significance threshold p and the magnitude of the effect, represented by Cohen's f-squared coefficients (0.02-0.14 small, 0.15-0.34 medium, 0.35> high).[11]

Table 3. Path coefficients, p values and effect sizes for the “under 20-35” group

Variable	Trust	Useful	Inf	Relev	Atit	Intinf	Idistr	Iloyal
Trust								
Useful			0.843 p<0.001 0.711					
Inf								
Relev								
Atit	0.246 p<0.001 0.155	0.349 p<0.001 0.242	0.062 p=0.249 0.043	0.492 p<0.001 0.370				
Intinf					0.691 p<0.001 0.478			
Idistr					0.662 p<0.001 0.438			
Iloyal					0.709 p<0.001 0.503			

From the start, we notice the invalidation of the Information-Attitude link for this group, due to the non-observance of the significance threshold $p < 0.05$, which means that regardless of the intensity difference signaled, the effect has no statistical validity. Differences in effect sizes will be discussed in detail following the presentation of p values and effect sizes in the case of the age variable presented for each age group, where there is a significant difference between groups.

Table 4. Path coefficients, p values and effect sizes for the “36-50” group

Variable	Trust	Useful	Inf	Relev	Atit	Intinf	Idistr	Iloyal
Trust								
Useful			0.588 P=0.002 0.345					
Inf								
Relev								
Atit	0.433 p<0.001 0.329	0.164 P=0.002 0.104	0.096 P=0.021 0.043	0.470 p<0.001 0.363				
Intinf					0.678 p<0.001 0.460			
Idistr					0.716 p<0.001 0.413			
Iloyal					0.632 p<0.001 0.399			

Table 5. Path coefficients, p values and effect sizes for the “over 50” group

Variabila	Trust	Useful	Inf	Relev	Atit	Intinf	Idistr	Iloyal
Trust								
Useful			0.813 p<0.001 0.833					
Inf								
Relev								
Atit	0.363 P=0.012 0.361	0.673 p<0.001 0.671	-0.028 P=0.401 0.028	-0.013 P=0.038 0.009				
Intinf					0.689 p<0.001 0.475			
Idistr					0.564 p<0.001 0.318			
Iloyal					0.797 p<0.001 0.635			

Based on the new p values and effect sizes in the case of the age variable, in the tables of the path coefficients and the p values, we note the following:

1. The direct and positive relationship between the informative character of the promotional messages sent by companies through the online social platform and the perceived usefulness of the promotional messages sent is more intense for the "under 20-35" group and the "over 50" group (high effect) , with a significant difference in intensity between the three groups at a significance threshold $p < 0.05$
2. The direct and positive relationship between the user's trust in the messages sent by companies through the online social platform and the attitude towards the messages sent by companies through the online social platform is higher in the case of the "over 50" group, with a significant difference intensity between the three groups.
3. The direct and positive relationship between the perceived usefulness of promotional messages sent by companies through the online social platform and the attitude towards the messages sent by companies through the online social platform is higher in the case of the "over 50" group, with a significant difference in intensity between groups.
4. The direct relationship between the informative character of the promotional messages sent by companies via the online social platform and the attitude cannot be validated in case of differences between groups, the significance threshold exceeding the value of 0.05.
5. The direct and positive relationship between the relevance of promotional messages sent by companies through the online social platform and the attitude towards the messages is stronger in the case of the "under 20-35" (high effect) and "36- 50 "(high effect), with a significant difference in intensity from the " over 50 "(low effect) group.
6. In the direct and positive relationship between the attitude towards the messages sent by companies through the online social platform and the intention to use the information (further inform oneself), the difference between the effects is insignificant.
7. The direct and positive relationship between the attitude towards the messages sent by companies through the online social platform and the intention to distribute the information within the social platform is more intense in the case of the "below 20-35" and "36-50" groups high), with an existing significant difference in intensity between groups.
8. In the direct and positive relationship between the attitude towards the messages sent by companies via the online social platform and the intention to become loyal to the company or brand, the difference between the groups is insignificant.

4. CONCLUSIONS AND IMPLICATIONS

With reference to the study objectives and our findings supported by the SEM analysis results, we are able to formulate a series of strategic proposals, in accordance with the social media consumers' age group.

First, in the case of users up to 35 years old (young consumers) we suggest marketing communication approaches highlighting the messages' informative character and relevance, with welcome interventions undertaken at the cognitive and symbolic levels, with the objective and an affective and/or symbolic positioning. This group will respond favorably to strategic approaches that stimulate communication and participation, that engage them in conversation, making it easier to achieve word-of-mouth when the attitude towards communication effort is favorable.

Second, in the case of users 36 to 50 years old, we recommend trust building strategies and highlighting relevance. This group is prone to sharing the information received as long as the source is trustworthy and relevant to their interests, strategies that underline the usefulness factor to stimulate communication and participation. Interventions at the affective and conative level will generate more favorable responses, as long as emphasis is placed on affective and symbolic positioning.

Third, in the case of the over 50 group, we suggest trust-building communicational strategies, and offering options that highlight the usefulness and informative characters, in which cognitive interventions will preferably be undertaken through objective positioning.

The present study brings insights for corporate communication, showing that potential consumers under the age of 35 are prone to advocate on behalf of new brands or companies, driven by perceptions of company's perceived relevance in the online social media space. Explaining connections between perceptions of promotional messages, brand perception, and WOM propensity, the current study adds contributions to the previous findings on consumer stereotypes [12], applied to consumer-company interactions, by differentiating age groups and highlighting generational cohort behavior.

Future research is encouraged to investigate the "under 20" and "20-35" groups separately, as in the present case we lacked representativeness for users under the age of 20. Future research may also explore hidden mediating variables that may hinder the formation of intentions for different age groups.

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